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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,674

Applicant(s)

LONG, MICHAEL V.

Examiner

AHMED E. HUQ

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 02 February 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-34 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claims 1-34 are presented for examination

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 11/037895, filed on 03/05/2003.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claim 1, as the term "Computer-readable medium" (p.10, lines 1-6) used as signal.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7, 14-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-7 are directed to a computer readable medium bearing instructions for providing the software development environment of the invention. According to the disclosure, computer readable media may comprise computer storage media and communication media, wherein the communication media is stated to include modulated data signal such as a carrier wave (Page 10, lines 1-6). A signal or carrier wave is not a

tangible physical article or object to constitute a machine, manufacture or composition of matter, and it is not a process either, these claims do not fall within a statutory category of invention.

Claims 2-7 are mirror the deficiencies of claim 6 and are also rejected as non-statutory.

Claim 14, recites " A software component framework" that has been reasonably interpreted as computer program, component, listing per se. Claim 14 fails to recite the "software component" as stored on an appropriate computer readable medium, which defines structural and functional interrelationships between the software and other components of a computer that permit the software's functionality to be realized-see MPEP 2106.01(I), Therefore, Claim 14 is rejected as non-statutory.

Claims 15-27 are mirror the deficiencies of claim 14 and are also rejected as non-statutory.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah US 6,256,773 (hereinafter "Bowman-Amuah") in view of Storistenau US 6,792,595 (hereinafter "Storistenau").

Claim 1, Bowman-Amuah teaches A computer program embodied on a computer-readable medium (Fig. 1), providing a development environment for creating a component-based architecture (Col. 4, lines 13-18), the computer program comprising:

First software configured to register (version control) one or more software components in accordance with an interface definition file associated with each component (Col. 26, lines 25-43 version control and compatibility are key considerations when managing packages. It includes software component, test scripts, test data and design documentation. These software components are connected under configuration management 270) , each interface (configuration management system 270) definition file being based on a structured markup language identifying one or more methods invocable by the associated component (Col. 8, lines 3-15, Col. 9, lines 11-31, Col. 25, lines 57-60);

Third software configured to manage a data structure which organizes the components and the one or more methods of the script (Col. 25, lines 38-60); and,

Fourth software configured to deploy the script to a component-based architecture (Col. 25, lines 44-51 where packaging allows the grouping of components into deliverable packets of application software that can be developed, tested and eventually delivered to the production environment),

But Bowman-Amuah does not explicitly teach functionality of component-based script in a hierarchal tree format. However, Storistenau teaches in the same analogous art of

generate a graphical interface to build a component-based script in hierarchal tree format which it is related or from which it inherits (see Abstract) which comprising second software configured to generate a graphical interface so as to enable a user to build a component-based script in a hierarchal tree format using the components, the hierarchal tree format comprising a plurality of hierarchal levels (see Fig. 1 graphic representation of dependent nodes and Col. 4, lines 29-41) , wherein at least one instance of a component of a first level is configured to interact with at least one component of a second level as defined by the one or more methods (Fig. 2A and 2B illustrate a series of dependent nodes function1 54 and function2 54 of main 53, Col. 4, lines 42-63); Therefore,

It would have been obvious to one of ordinary skills in the art at the time the invention to combine Bowman-Amuahs' comparison of different version of program in a development architecture framework (see abstract) and Storistenau's generate a graphical interface to build a component-based script in hierarchal tree format within the developmental environment. Combination of Storistenau into Bowman-Amuah's art will benefit the interdependencies between various components of a program environment as whole which made readily apparent and permit user to edit the source code component while viewing the hierarchical relationship in smaller, simpler format as one suggested by Storistenau (Col. 2, lines 35-44, 58-67).

Claim 2, Bowman-Amuah teaches wherein the first software performs the steps of: parsing the interface definition file, each interface definition file comprising an interface definition (Col. 8, lines 51 to Col. 9 lines 10), and storing the interface definition

into a memory module (Col. 9, lines 1-10 where API allow developer to add interactive content to web documents. An applet execute within a JAVA-compatible browser by copying code from the server to client, Fig. 1, ROM 116, RAM 114).

Claim 3, Bowman-Amuah teaches wherein the fourth software deploys the script using a deployable interface (Fig. 7, release development 700) individually implemented by the one or more components (Col. 25, lines 44-52).

Claim 4, Bowman-Amuah teaches fifth software (HTML) configured for exchanging (HTTP) components over a network (Col. 1 lines 59 to Col. 2 lines 6).

Claim 5, Bowman-Amuah teaches wherein the network is a global network (Col. 1, lines 41-49 where the Web is global network).

Claim 6, Bowman-Amuah teaches wherein the fifth software is a webserver (Col. 1 lines 59 -67).

Claim 7, Bowman-Amuah teaches wherein the network is a peer-to-peer network (Col. 14, lines 48-61, where application team 500 sends task to application development work cell 1, 504 and application development work cell 2, 504. Their role is to helping application developer to correctly use the architecture components, providing development support. Therefore, team 500 send task to other sub-team within the same network)

As per Claim 28, same art and rationale apply as claim 1. In addition (Fig. 1 illustrates a computer system consists of CPU 110, display unit 138 and memory 116 and 114)

Claim 29, Bowman-Amuah teaches wherein the processor (Fig. 1, CPU 110) deploys (Fig. 7, release development 700) the script to a component-based architecture (Col. 27, lines 4-15).

As per Claims 30-33, same art and rationale apply as claims 2-5. In addition (Fig. 1 illustrates a computer system)

As per Claim 34, same art and rationale apply as claim 7. In addition (Fig. 1 illustrates a computer system).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-13 are rejected under 35 U.S.C 102(b) as being anticipated by Storistenau US 6,792,595 (hereinafter “Storistenau”).

Claim 8, Storistenau teaches A computer-implemented method providing a visualization of a component-based architecture development environment (see abstract) comprising the step of:

generating a display of a component-based script in a hierarchal-tree format comprising one or more hierarchal levels (see Fig. 1 and Col. 4, lines 29-41), each level comprising at least one component wherein a relationship between the at least one component of a first hierarchal level (Fig. 1 function1 54) and the at least one component of a second hierarehal level (Fig. 1 function3 54) is visually represented as

being defined by a method (Fig. 2A and 2B illustrate a series of dependent nodes function1 54 and function2 54 of main 53, Col. 4, lines 42-63);

Claim 9, Storistenau teaches wherein the display comprises a canvas for displaying the script (Fig. 2A and 2B), and an interacts window (Fig. 2A, Edit window 56) for displaying the one or more methods available for defining the relationship between the components of the script (Col. 5, lines 1-22).

Claim 10, Storistenau teaches wherein the interacts window further displays one or more components that may be passed as a parameter to the one or more method selections (Col. 5, lines 35-49 where Fig. 3A and 3B illustrate different nodes 54 for editing component of source file).

Claim 11, Storistenau teaches portions of the script may be toggled between a hidden state and a revealed state (Col. 8, lines 60-65).

Claim 12, Storistenau teaches wherein the display of the script may be expanded or collapsed in real time enabling an unlimited number of intermediate positions (Col. 6, lines 33-44).

Claim 13, Storistenau teaches wherein the one or more components are displayed connected to the method by connect-bars (Col. 4, lines 30-41 where node 53 is connected with link 52).

5. Claims 14-24 are rejected under 35 U.S.C 102(b) as being anticipated by Bowman-Amuah US 6,256,773 (hereinafter "Bowman-Amuah")

Claim 14, Bowman-Amuah teaches a software component framework including one or more components (see abstract), each component comprising:

a component binary comprising an implementation portion of the component framework (Col. 94, lines 43-50 where ASCII text editor is fully integrated editor within integrated development environment).

a component wrapper (Packaged Component Integration 232) comprising an interface portion of the component framework enabling the component binary to interface with a development environment (Col. 94, lines 43-50, Col. 95, lines 35-42), and an interface definition file comprising an interface definition portion of the component framework that enables the component wrapper to register with the development environment (Col. 92, lines 50-67 which provide an interface bridge between the wrapped elements that makes that package accessible from a different operating environment).

Claim 15, Bowman-Amuah teaches wherein the component binary is a compiled object class (Col. 94, lines 43 to Col. 95, lines 15).

Claim 16, Bowman-Amuah teaches wherein the interface definition file comprises a description schema in a structured markup language (Col. 4, lines 9-19).

Claim 17, Bowman-Amuah teaches wherein the structured markup language is extensible Markup Language (XML) (Col. 8, lines 10-16, 21-30 where XML is extended version that constructed from HTML, which is a simple data format used to create hypertext documents that are portable from one platform to another).

Claim 18, Bowman-Amuah teaches wherein the interface definition file comprises a meta section, an interface section, and a component-tree section (Col. 9, lines 16-28

where the sections of markup language HTTP is embedded in software which is inherent).

Claim 19, Bowman-Amuah teaches wherein the interface definition file identifies one or more classes of which the component wrapper (Packaged Component Integration 232) is an inheriting subclass (Col. 5, lines 38-51, 63-67 where OOP language are consist with object class and subclass).

Claim 20, Bowman-Amuah teaches wherein the interface section comprises one or more method sections each identifying a method encapsulated in the component wrapper(Packaged Component Integration 232, Col. 5, lines 38-51), the one or more methods being an attachment point to the component wrapper (Col. 5, lines 57-62).

Claim 21, Bowman-Amuah teaches wherein each method section further identifies an object type passed to the method at invocation (Col. 6, lines 1-5).

Claim 22, Bowman-Amuah teaches if the one or more components is deployable, the one or more components has an individual build method for a deployment process (Col. 14, lines 52-61 where at the development stage Fig. 5, application development work cell1, each component is serviced, tested and deploy at proper target platform).

Claim 23, Bowman-Amuah teaches wherein the one or more components is shared over a network (Col. 1, lines 41-49 where the Web is global network).

Claim 24, Bowman-Amuah teaches wherein the one or more methods is of a component method-type that sets a new component to a component script (Col. 8, lines 51-59 where 'Widget' create custom make UI components).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah US 6,256,773 (hereinafter “Bowman-Amuah”) in view of Edwards et al. US 6,792,595 (hereinafter “Edwards”).

Claim 25, Bowman-Amuah teaches comparison of different version of program in a development architecture framework (see abstract). But Bowman-Amuah does not explicitly teach functionality of method type property that sets value. However, Edwards teaches in the same analogous art of the heterogeneous program that predefined program tools can modify functions in a distributed environment (see abstract) which comprising: wherein the one or more methods is of a property method-type that sets a value to a property defining a component (Col. 6, lines 1-22 where instruction sets parameter by platform).

It would have been obvious to one of ordinary skills in the art at the time the invention was make to understand Bowman-Amuah’s comparison of different version of program in a development architecture framework (see abstract) and Edwards application program inter API that enables dynamic modification to application executing in a heterogeneous distributed environment so that program remains operational while the application is analyzed and modified; therefore by combining Edwards into

Bowman-Amuah art will benefit programmer to execute application which allow software modules in different process places a set of mechanism which allow each other capabilities remain operational while application is analyzed and modified as one suggested by Edward (Col. 1, lines 60-67).

Claim 26, Edwards teaches wherein the one or more methods is of a command method-type that denotes action within the component (Col. 35-45 when codes are logically connected with other file, so that it can be easily manipulate during the transformation process 430).

Claim 27, Edwards teaches wherein the property method-type sets the value to the property from either a link component whose value is set dynamically or a link-constant component whose value is set statically (Col. 8, lines 60 to Col. 14, see table 1, 2 and 3).

Conclusion

7. Applicant is advised to review all the references cited in 'PTO-892' prior to response.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED E. HUQ whose telephone number is (571)270-1515. The examiner can normally be reached on Monday-Friday 9:-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for

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the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ahmed E Huq/
Examiner, Art Unit 2192
7/7/2008

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192